

# ABSTRACT

It is an object to provide a manufacturing process for a printed wiring board in which a copper foil and resin as  
5 a substrate material of a copper clad laminate are irradiated with carbon dioxide gas laser light to drill in both of them simultaneously. In forming a through hole or a hole such as IVH, BVH or the like in the copper clad laminate using carbon dioxide gas laser light, one of a nickel layer of 0.08 to 2  
10  $\mu\text{m}$  in thickness, a cobalt layer of 0.05 to 3  $\mu\text{m}$  in thickness and a zinc layer of 0.03 to 2  $\mu\text{m}$  in thickness is formed as an additional metal layer on a surface of the copper foil residing in an external layer of the copper clad laminate and thereafter, by performing laser drilling, the copper foil  
15 layer and the resin layer as a substrate material of the copper clad laminate are enabled to drill simultaneously.